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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,722	02/14/2002	Emanuel Shenkar	CCK-0071	2102

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EXAMINER

SMALLEY, JAMES N

ART UNIT PAPER NUMBER

3727

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/076,722

Applicant(s)

SHENKAR, EMANUEL

Examiner

James N Smalley

Art Unit

3727

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-5, 7-19, 21-25 and 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-4, 7-9, 11-19, 21-25 and 27 is/are rejected.
- 7) ☒ Claim(s) 5 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2-4, 7-9, 11-14 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayes US 4,978,016 in view of Kelly US 5,400,913.

Hayes '016 teaches a cap (11) for a container, having a tamper evident ring (22) comprising a main body portion (30) and lower portion (29), formed of retaining elements (44) and flexible web portions (42) which define openings (36), and wherein the lower portion is formed in a first molded position extending below and substantially aligned with the main body portion, before application on a container.

Hayes '016 does not disclose predetermined crease lines, but does teach a suggestion for providing means to promote the upward and inward bending of the lower band. In col. 4, lines 66+, Hayes '016 discloses, "[T]he provision of the relief ports (36) permits the hoop to deform radially in the regions between the hinges, as indicated at (42) in Fig. 6, and thereby relieve the compression strength that arises along its distal edge (32) as the hoop is inverted from the down position to the up position."

Kelly '913 teaches creases (13)/(113)/(213)/(713) connecting retaining elements, which promote the upwards and inward bending of the lower ring portion. It is further well known that crease lines in any form promote bending about a desired point.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the lower ring of Hayes '016, providing predetermined crease lines as taught by Kelly '913, motivated by the benefit of reducing compressive stresses during the upwards and inward bending of the lower ring portion.

Regarding claims 13-14, Hayes '016 does not teach the angular relationship between the lower ring portion and the longitudinal axis of the downwardly depending sidewall portion, instead only

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disclosing it is formed in a "conical" shape (col. 2, line 37). It is known that by molding the lower ring portion closer to alignment with the downwardly depending sidewall portion, the ring portion must be rotated upward and inward through a larger angle, and thus stores more energy in the hinge. This increased storage energy forces the lower ring portion to more tightly grip about the container neck bead, and better secures the lower ring portion to the bottle.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the lower ring of Hayes '016, forming it such that it is 10 degrees, 20 degrees, or any suitable angle divergent from the longitudinal axis of the downwardly depending sidewall portion, motivated by the benefit of providing an increased stress within the lower ring portion to more strongly grip against a container neck bead.

Regarding claims 11-12, Hayes '016 teaches all claimed structural limitations of the instant invention, and would thus be inherently capable of being circumferentially compressible by 10 or even 20 percent, dependant upon the thickness of the flexible webs and tamper evident ring main body portion. One having ordinary skill in the art at the time the invention was made would have found it obvious to modify the thickness of the tamper evident ring main body portion and flexible web portions to provide a desired strength, or resiliency to the functioning parts of the invention.

3. Claims 15-19 and 23-25 rejected under 35 U.S.C. 103(a) as being unpatentable over Hayes US 4,978,016 in view of Kelly US 5,400,913 and in view of Hayes US 4,657,153.

Hayes '016 teaches a cap (11) for a container, having a tamper evident ring (22) comprising a main body portion (30) and lower portion (29), formed of retaining elements (44) and flexible web portions (42) which define openings (36), and wherein the lower portion is formed in a first molded position extending below and substantially aligned with the main body portion, before application on a container.

Hayes '016 does not disclose predetermined crease lines, but does teach a suggestion for providing means to promote the upward and inward bending of the lower band. In col. 4, lines 66+, Hayes '016 discloses, "[T]he provision of the relief ports (36) permits the hoop to deform radially in the

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regions between the hinges, as indicated at (42) in Fig. 6, and thereby relieve the compression strength that arises along its distal edge (32) as the hoop is inverted from the down position to the up position."

Kelly '913 teaches creases (13)/(113)/(213)/(713) connecting retaining elements, which promote the upwards and inward bending of the lower ring portion. It is further well known that crease lines in any form promote bending about a desired point.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the lower ring of Hayes '016, providing predetermined crease lines as taught by Kelly '913, motivated by the benefit of reducing compressive stresses during the upwards and inward bending of the lower ring portion.

Hayes '016 does not teach folding the lower ring portion during the application of the cap on a bottle.

Hayes '153 teaches in col. 4, lines 16-30, it is known to fold a lower ring upwards and inwardly, during a capping operation. Performing the folding operation during the capping operation reduces the total number of manufacturing steps.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the application method of Hayes '016, performing the lower ring upwards and inward folding operation during the capping operation, as taught by Hayes '153, motivated by the benefit of reducing the number of manufacturing steps during the forming and application of the closure cap.

Regarding claims 16-17 and 24-25, Hayes '016 teaches all claimed structural limitations of the instant invention, and would thus be inherently capable of being circumferentially compressible by 10 or even 20 percent, dependant upon the thickness of the flexible webs and tamper evident ring main body portion. One having ordinary skill in the art at the time the invention was made would have found it obvious to modify the thickness of the tamper evident ring main body portion and flexible web portions to provide a desired strength, or resiliency to the functioning parts of the invention.

Regarding claims 18-19, Hayes '016 does not teach the angular relationship between the lower ring portion and the longitudinal axis of the downwardly depending sidewall portion, instead only disclosing it is formed in a "conical" shape (col. 2, line 37). It is known that by molding the lower ring

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portion closer to alignment with the downwardly depending sidewall portion, the ring portion must be rotated upward and inward through a larger angle, and thus stores more energy in the hinge. This increased storage energy forces the lower ring portion to more tightly grip about the container neck bead, and better secures the lower ring portion to the bottle.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the lower ring of Hayes '016, forming it such that it is 10 degrees, 20 degrees, or any suitable angle divergent from the longitudinal axis of the downwardly depending sidewall portion, motivated by the benefit of providing an increased stress within the lower ring portion to more strongly grip against a container neck bead.

4. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hayes US 4,978,016 in view of Kelly US 5,400,913 as applied above to claim 21, in further view of Hock et al. US 6,119,883.

Hayes '016 does not teach a "V-shaped" ventilation opening.

Hock '883 teaches a "V-shaped" ventilation opening in fig. 10, and further teaches it is a known variation of the rectangular shaped openings of Hayes '016.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the tamper evident ring openings of Hayes '016, providing a "V-shaped" as taught by Hock '883, motivated by design choice.

#### ***Allowable Subject Matter***

5. Claims 5 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

6. Applicant's arguments with respect to claims 2-5, 7-19, 21-25 and 27 have been considered but are moot in view of the new ground(s) of rejection.

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**Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

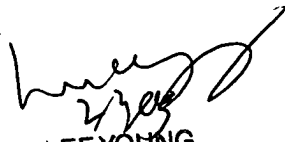
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James N Smalley whose telephone number is (571) 272-4547. The examiner can normally be reached on M-Th 9-6:30, Alternate Fri 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lee Young can be reached on (571) 272-4549. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jns

  
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